

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/017,658 12/12/2001		Scott Derner	400.105US01	7933		
27073	590 01/15/2003					
LEFFERT JAY & POLGLAZE, P.A. P.O. BOX 581009			EXAMINER			
	IS, MN 55458-1009		NGUYEN, TAN			
			ART UNIT	PAPER NUMBER		
			2818			
			DATE MAILED: 01/15/2003			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applic	ation	No.	Applicant(s)	
		10/017,658				
Office Action Summary					DERNER ET AL	
		Exami	-		Art Unit	
Davis de	The MAILING DATE of this communication or Reply	Tan appears on	the co	Nguyen	2818	
Period f						ress
- External e	ORTENED STATUTORY PERIOD FOR RE MAILING DATE OF THIS COMMUNICATIOnsions of time may be available under the provisions of 37 CFF SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a period for reply is specified above, the maximum statutory per re to reply within the set or extended period for reply will, by steeply received by the Office later than three months after the mad patent term adjustment. See 37 CFR 1.704(b).	R 1.136(a). In no . reply within the s riod will apply and	event, h tatutory will exp	nowever, may a reply be time minimum of thirty (30) days pire SIX (6) MONTHS from t	ely filed will be considered timely.	umunication.
1)🖂	Responsive to communication(s) filed on Q)2 Decembe	r 2001	2		
2a)	**************************************	This action				
3)	=2)64	THIS ACTION	s non	i-tinai.		
Dispositi	Since this application is in condition for allo closed in accordance with the practice und on of Claims	er Ex parte	ept for Q <i>uayl</i>	formal matters, pro le, 1935 C.D. 11, 45	secution as to the 3 O.G. 213.	merits is
4)⊠	Claim(s) <u>1-4.8-17,21 and 22</u> is/are pending	in the applic	ation			
•	la) Of the above claim(s) is/are withd	rawn from c	onside	eration.		
5)⊠	Claim(s) <u>9-13</u> is/are allowed.					
6)⊠	Claim(s)	ed.				
	Claim(s) is/are objected to.					
8)	Claim(s) are subject to restriction and new papers	or election	equir	ement.		
	he specification is objected to by the Examir					
10)□ T	ne drawing(s) filed on is/are: a)□ acc	ier,				
	Applicant may not request that any objection to t	the drawing (objec	cted to by the Exami	ner.	
11) 🗌 TI	ne proposed drawing correction filed on	ane urawing(s) مالاد عات	pe ne	eld in abeyance. See	37 CFR 1.85(a).	
	If approved, corrected drawings are required in r	is. a) a enly to this O	pprov	'ed b)∐ disapprove	d by the Examiner.	
12)[] Ti	e oath or declaration is objected to by the E	xaminer	iice at	cuon.		
Priority un	der 35 U.S.C. §§ 119 and 120	currintor.				
	cknowledgment is made of a claim for foreig	ın nriority un	dor 2	ELLO O D 4404) .		
a) <u></u>	All b) Some * c) None of:	in priority un	uei 3	5 U.S.C. § 119(a)-(d) or (f).	
	Certified copies of the priority documen	ts have bee	1 roos	a is an al		
2.	Certified copies of the priority documen	ts have bee	rece	vived in America v		
3.	Copies of the certified copies of the price	offy docume	nto be	ived in Application	No	
* See	Copies of the certified copies of the price application from the International But the attached detailed Office action for a list	of the certif	tule i	17.2(a)). Dies not received		
14)LJ ACK	nowledgment is made of a claim for domest	ic priority un	der 3	5 U.S.C. & 119(e) (t	O a provisional and	dioation)
4, ∟	The translation of the foreign language pronounced for the properties of a claim for domest	wicional an	بندحنا			nication).
	References Cited (PTO-892) Draftsperson's Patent Drawing Review (PTO-948) on Disclosure Statement(s) (PTO-1449) Paper No(s)		ッド	Interview Summary (PT Notice of Informal Pater Other:	O-413) Paper No(s) t Application (PTO-152	<u> </u>
)-326 (Rev. 0-	LOTA	tion Summary				

Application/Control Number: 10/017,658

Art Unit: 2818

- 1. The following action is in response to the amendment filed by Applicants on December 2, 2002.
- Claims 5-7 and 18-20 have been canceled.
 Claims 1-4, 8-17 and 21-22 are pending.
- 3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-4, 8, 14-16, 17, 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Takasugi (U.S. Patent No. 5,663,906).

Takasugi disclosed in figure 1 a semiconductor memory device comprises a memory array [10] (column 3, line 57). The memory cell array [10] is made up of a plurality of subarrays [10₁-10_n]. Further, the memory cell array [10] comprises a DROM (DRAM and ROM) unit [10A] comprised of memory cells which serve as volatile memory (DRAM) (column 9, lines 58-59, 63 to column 10, line 5), and memory cells serve as a non-volatile memory (ROM) (column 3, line 66 to column 4, line 5). Takasugi further disclosed each of the subarrays [10₁-10_n] includes a pair of complementary bit lines [BL_i/BL_i] (column 4, line 7) coupled to the memory cells and a sense amplifier [12_i] (column 4, line 29).

Regarding claim 2, Takasugi disclosed the ROM cells $[11_{1,1}, 11_{2,1}, 11_{5,1}, 11_{6,l}]$ are ROM cell having transistors coupled to either the bit line $[BL_i]$ or $[/BL_i]$, and the gate of

Application/Control Number: 10/017,658 Page 3

Art Unit: 2818

the ROM cells [11_{1,I}, 11_{2,I}, 11_{5,I}, 11_{6,I}] and the gate of the DRAM cells [11_{3,I}, 11_{4,I}] are coupled to different word lines [WL₁-WL₆].

Regarding claims 3-4, 8, 15-16, 21-22, Takasugi disclosed that the ROM cells are coupled to either the bit line [BLi] which carries potential V_{cc} , or bit line [/BLi] which carries potential V_{ss} .

- 5. Applicant's arguments with respect to claims 1-4, 8, 14-17 and 21-22 have been considered but are most in view of the new ground(s) of rejection.
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan T. Nguyen whose telephone number is (703) 308-1298. The examiner can normally be reached on Monday to Friday from 07:00 AM to 03:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms, can be reached on (703) 308-4910. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Tan T. Nguyen Primary Examiner Art Unit 2818 January 08, 2003